

YOUR FUTURE PARTNER IN RESEARCH AND BUSINESS DEVELOPMENT

MID SWEDEN

# WELCOME TO THE PEAK REGION

The Peak Region, in the county of Jämtland, is a European centre for research and business development in tourism, sports and the outdoors, and is located in central Sweden.

Home to world leading research environments that focus on tourism, winter sports and the outdoors, the Peak Region boasts some of the world's foremost destinations, brands for outdoor products, dedicated sporting interests with elite athletes and Olympic gold medallists, and public bodies that are committed stakeholders.

The Peak Region is famous as a multinational, innovative playground for young, creative talent and as a co-operative region that is aiming to be a world leader through sustainable growth.

The region sits at a latitude of 63° north. This parallel crosses Alaska and, in the southern hemisphere, the Antarctic. However, proximity to the Gulf Stream means that the Scandinavian climate is appealing, with snowy winters and relatively hot summers, meaning it can operate at optimum temperature in every season. This means that many different types of tourism, sports and outdoor activities are available.

Living and working in the Peak Region in Jämtland means being close to Nature and understanding the need for tourism experience, good products, and it is this that has allowed many family businesses to grow to become international brands in high-end market segments.

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STOCKHOLM

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THE PEAK REGION | MID SWEDEN





Access to cutting-edge research, assistance from research engineers in testing and prototyping laboratories, and office space in the creative environment of the Mid Sweden Science Park in Åre/Östersund will give your business development team a flying start.

#### Access to research expertise

Mid Sweden University has unique, world leading research environments for tourism, winter sports, and business development, providing opportunities to access research expertise and participate in research projects that boost your development. Companies that are part of the Peak Region are prioritised when new research projects are established. Other forms of expertise are also available, such as via projects from students on the sports technology degree and the tourism studies degree. The region is also renowned for its labour supply.

#### Part of a successful cluster

The region's leading mountain destinations with all-year-round tourism are successfully developing brands which attract an increasing number of international visitors. Many successful brands have been founded in the Peak Region, such as Peak Performance, Hilleberg the Tentmaker, Klättermusen, Lundhags, Trangia and Woolpower. The region also attracts and hosts many international sporting events, including the Alpine World Championships and the Biathlon World Championships. Researchers, companies, product developers, designers and elite athletes all flock here, thanks to the good conditions and support from the local authorities.

#### Access to quality test laboratories

Seize the opportunity to make prototypes at a reduced cost when developing products in the Peak Region. The Sports Tech Research Centre offers a prototype lab as well as a textile lab and wind tunnel lab, all of which are available to companies that are established in the region. The Swedish Winter Sports Research Centre in Östersund has high-tech labs for physiological and biomechanical testing, with a particular focus on cross-country skiing and biathlon, including a climate chamber. The European Tourism Research Institute's research is conducted in close collaboration with the area's leading destinations.

Peak Innovation is a partner for researchers, business developers and companies that wish to conduct development activities in the areas of tourism, sport and the outdoors in the county of Jämtland.

Contact us to discover how you can be part of the Peak Region! Our services are free of charge.





The Swedish Winter Sports Research Centre (SWSRC) is one of the world's leading laboratories for winter sports research and development. This is where elite winter athletes, researchers and companies work together to develop future innovations and sports products.



B ased in the city of Östersund, the centre focuses on innovation, user-driven research and technology and has rapidly become an international 'melting pot' for researchers and companies from all over the world thanks to its unique high-tech facilities and the opportunities it offers.

"The research lab creates an incredible opportunity for me as an elite sportsman!"

- Emil Jönsson, elite sprint skier

A special area of interest for the SWSRC is to conduct studies based on the integration of the two knowledge fields of physiology and biomechanics in order to achieve a more comprehensive understanding of factors affecting performance. This is carried out primarily with cross-country skiing and biathlons as a working model in the laboratory and in the field. The SWSRC works nationally with other universities and research centres, but also in several international research projects.

#### **Designing new products**

At the SWSRC there is comprehensive development of technical sporting equipment. This includes work by Craft, which, in partnership with the SWSRC and Ski Team Sweden, has designed a new race suit using muscle-assisting materials. Sture Espwall, research administrator at the SWSRC, is very positive about this partnership: "We have a great number of active sportspeople and the facilities are of such good quality that companies see great value in being here.

We have increasing collaborations with companies that want to develop their sports products."

#### Altitude and temperature simulation

The new Climate Chamber Lab can simulate both altitude (0-9,000m) and temperature (-20 to +30°C). This provides exciting opportunities for new research projects, optimisation of training and development for the athletes, but also better conditions for the SWSRC to co-operate with partners in the fields of business, sports and recreation in terms of different types of verification of products and services.

## Internet of sports

A growing field, as well as application, is the use of modern IT in a performance environment.

Researchers, coaches and athletes with high demands to further develop IT products for use in sport and tourism ('mass follows class') interact with field stations and major arenas for winter sports in the Peak Region by means of the latest information technology.

"Thanks to the co-operation with the SWSRC and research engineer Mikael Swarén, we have gained access to new skills and resources for the development of sports protection. Our mission to save lives and reduce the severity of injuries has benefitted from this co-operation as our products are getting more innovative and new improvements – everything to keep our customers safe."

- Stefan Ytterborn, CEO and founder, POC

## Swedish National Alpine Arena in Åre

The mountain village Åre is a world class ski resort that is highly attractive to investors, companies, sponsors and the labour force. The region is a creative centre for businesses and is a hub for outdoor companies. Åre works as a brand name and dooropener for businesses that would like to build their brand in Scandinavia.

The National Alpine Arena was built for the 2007 World Ski Championships in Åre and has since then developed into a top of the line facility for R&D. The centre has high-tech tools for biomechanical and equipment analysis, for example a high-speed camera. The arena is co-located with the SWSRC and Mid Sweden University.

"We had very close, successful co-operation with the Swedish Winter Sports Research Centre during the preparations for the last two Winter Olympics, in Vancouver and Sochi. This allowed us to develop the world's fastest skiwear for the Swedish cross-country team and has resulted in our own Craft Research and Development Lab at SWSRC in Östersund.

"SWSRC has great expertise in winter sports specifically, but also in other sports segments. We have worked on the development of a bike time trial suit, which has been used in the Tour de France, and on running clothes that have been developed in partnership with long distance runners from the Swedish national team."

- Jonas Peterson, CEO, Craft



Sports Tech Research Centre focuses on product development and design in the sports, outdoor and experiential industries. Sports Tech has advanced tools for assessing functionality and improving existing designs and expertise in developing innovative new products.



e have two cornerstones – our passion for sport and the outdoors, and ensuring that our research is suitable for commercialisation," says Professor Mikael Bäckström, director of the Sports Tech Research Centre.

Sports Tech conducts continuous research and is involved in significant collaborations between business, sports and other universities. The key to its success is combining outstanding researchers with high-end laboratories.

## **Prototype lab**

The Mid Sweden University prototype laboratory has a unique workshop, including a prototyping machine with almost unlimited potential for prototype

development, including in metal. This facility is unmatched in Swedish higher education and is regarded as one of the European leaders in this field. Our researchers work with new materials that could revolutionise the design of sports and outdoor equipment and medical implants.

#### Textile lab

Sports Tech's textile laboratory is an exceptional resource for the region's textile companies, particularly in the outdoor industry. The research environment is an active partner in the companies' product development process. Companies can use the lab to test their products with the assistance of research engineers; this even includes bulky items, such as tents or complete outfits. The laboratory is a

"We've been working together for several years and use their laboratory regularly. We test the quality of our fabrics; for example we test abrasion, pilling and shape stability after washing. This gives us confidence that the products we release on to the market are of the highest quality. Thanks to Sports Tech Research Centre we develop better products faster and with materials that maintain higher quality. They really understand our needs and our way of working; they are easily accessible and fast."

- Pål Dufva, head of product development and purchasing, Woolpower Östersund AB

world leader at testing products in simulated situations that closely resemble the tough environments in which the products will be used.

#### Wind tunnel lab

The laboratory contains a large treadmill that can be used by several people simultaneously and has various degrees of incline. The equipment calculates and adds a headwind based on the speed; it is also possible to set the temperature and introduce heavy wind and rain. Our researchers study skiing, running, cycling and other sports that can be

practised on a treadmill. Materials and products such as clothing, helmets and tents can also be tested, even while they are being worn or used. The wind tunnel is used for a range of development projects in disability sports as well.

The Sports Tech Research Centre has close links with the sports technology programmes, and BSc and MSc education in mechanical engineering that focuses on innovative product development. There are also opportunities to work with students from these unique programmes for a few months and gain a deeper understanding of your products.

"For us, Sports Tech Research Centre has meant faster and more reliable product development. We've used their textile laboratory a great deal to test for durability, water resistance, strength, flame resistance and more. Their wind tunnel is also going to be of great help to us. We'll be able to test our tents in an even more scientific way and complement our own studies. It's a significant advantage for us to be able to test materials directly at Sports Tech."

- Bo Hilleberg, chairman of the board, Hilleberg the Tentmaker AB

# ETOUR

Established in 1997, the European Tourism Research Institute (ETOUR), as Sweden's leading tourism research institute, develops and communicates scientific knowledge about tourism and travel. ETOUR works closely with entrepreneurs and industry, NGOs, and governmental entities.



Research at ETOUR primarily, but not exclusively, includes the disciplines of tourism studies, geography and human geography, and business administration. Research projects at ETOUR engage researchers from the Department of Tourism Studies and Geography, which also hosts the first PhD programme in tourism studies in Scandinavia, as well as other disciplines and research institutes and groups within Mid Sweden University. ETOUR is also involved in project partnerships with other Swedish and international universities and institutes.

Since its establishment, ETOUR has worked closely with actors (public and private) throughout the tourism sector to shape, design, deliver and support the utilisation of research-based knowledge. Changes in policy and decision making, as well as input, recommendations and tools for strategic business development and commercialisation of research

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findings, are all examples of the diversity of societal relevance and impact effects of our research.

ETOUR conducts state-of-the-art research in the multidisciplinary field of tourism, focusing on issues associated with destination development.

"The Swedish Government made great investments in producing a policy about the use of the outdoors, and researchers were very active in the work on that policy. We made great use of all the information, knowledge and various perspectives the researchers provided. I feel that research has given us an outdoor policy that is rigorous and appropriate."

- Christina Frimodig, communications officer at the Swedish Environmental Protection Agency



Destinations – as a concept – are perhaps the most foundational elements in any tourism system. Consequently, understanding destination development processes includes issues of consumer behaviour, entrepreneurship and innovation, economic output, governance, hospitality, seasonality, labour issues, natural and cultural resources, management, regional development, service delivery and quality, planning, sustainability and travel.

ETOUR specialises in four areas of research:

- E-tourism research for developing, marketing and managing tourism destinations;
- Nature-based tourism;
- Tourism's economic, political and spatial dynamics; and
- · Destinations.

## The Event Compass™

The Event Compass method is designed with all types of events in mind. It is packaged and delivered in modules so that each organiser can adapt the evaluations according to their own needs and priorities. Our services are also of use to other stakeholders that may have a need for quality assurances and comparisons between events. Whether sponsors, visitors or destinations, events that have used the Event Compass will be able to provide their stakeholders with the relevant information in a number of different areas. Amongst other things, examples include information on an event's economic impacts, experience and social effects.

#### **Business intelligence in tourism**

Travel and tourism, or the movement of people, has become more and more linked to electronically

handled processes since the advent of the World Wide Web. The internet is flooded with data about people's buying habits and desires, but most of the information is stored in databases of various stakeholders and remains as unused, valuable sources of knowledge. As the main driver behind the innovation capacity of places such as tourism destinations, knowledge has been identified as the essential base for long term competitiveness and sustainable development. However, managerial expertise and organisational learning at the level of tourism destinations could be significantly enhanced by applying methods of business intelligence.

ETOUR's research in the area of business intelligence in tourism aims to resolve the deficiency of unused and fragmented data sources by conceptualising, prototypically developing, testing and evaluating system solutions that support value creation through enhanced supplier interaction and decision making.

"Tourism is an industry that is continually and rapidly changing. It has a large number of small players that lack their own resources for R&D and a small number of large players with a limited interest in tourism research. Tourism research provides new knowledge and important new insights into an industry that influences large areas of society and has potential for growth."

- Lars-Börje 'Bulan' Eriksson, senior partner and consultant in the destination development company Razormind

**THE UNIQUE SITUATION IN WINTER 2019** with a double world championships hostmanship is rare and has never been seen before. On the road to 2019, and in this environment, the Peak Region creates a platform with the joint aim of placing us in the lead worldwide in research and development within tourism, sports and outdoor recreation. This aim is obvious all year round, albeit with a special emphasis during the winter season.





## Peak Innovation

TOURISM SPORTS OUTDOOR

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